

**WHAT IS CLAIMED IS:**

1. A communication device that connects with a network through a wireless local area network (WLAN) access point to receive data, the communication device comprising:
  - 5 a GPS receiving module for receiving position information of the connection device from a GPS satellite;
  - a WLAN module for connecting with the WLAN access point;
  - a storage unit for storing position information of the WLAN access point; and
  - 10 a controller for selectively operating the WLAN module based on the position information of the communication device output from the GPS receiving module and the position information of the WLAN access point stored in the storage unit.
2. The communication device of claim 1, wherein the position  
15 information of the WLAN access point includes a position of the WLAN access point and a service radius of the WLAN access point.
3. The communication device of claim 2, wherein the controller operates the WLAN module when the communication device is within the service radius of the WLAN access point.
- 20 4. The communication device of claim 2, wherein the WLAN module is operated by control of the controller to detect a beacon signal output by the WLAN access point.
5. The communication device of claim 1, wherein the communication device is connected to a position information server, which is connected to

the Network through the WLAN access point, and receives WLAN access point position information through the position information server to renew the position information stored in the storage unit.

6. A method for connecting to a wireless local area network (WLAN) access point, which is connected to a network, for a communication device that includes a WLAN module and a GPS receiving module, the method comprising:

- a) continuously checking a present position of the communication device through the GPS receiving module;
- 10       b) determining an operating point of the WLAN module based on stored position information of the WLAN access point and the position information of the communication device; and
- c) driving the WLAN module to detect a beacon signal periodically transmitted by the WLAN access point, and connecting to the WLAN access  
15       point with the detected beacon signal.

7. The method of claim 6, further comprising:

- d) receiving new position information of the WLAN access point from a position information server that is connected to the network following connection to the WLAN access point, and renewing the stored position  
20       information.

8. The method of claim 7, wherein step d) comprises:

- transmitting a "New Position Information Verification" message to the position information server through the WLAN module;
- receiving from the position information server a reply to the above

message, that is, a "Position Information Renewal" message or a "No New Information" message; and

receiving new position information of the WLAN access point from the position information server in the case where the communication device  
5 receives the "Position Information Renewal" message, and performing processes to renew the position information.

9. The method of claim 8, further comprising:

the position information server receiving the "New Position Information Verification" message;

10 checking version information of WLAN access point position information that the communication device has from the "New Position Information Verification" message;

transmitting the "Position Information Renewal" message to the communication device in the case where a first version of the WLAN access  
15 point position information that the communication device has is older than a second version of present WLAN access point position information;

transmitting the "No New Information" message to the communication device if the first version is identical to the second version; and

20 transmitting WLAN access point position information corresponding to the second version to the communication device after the "Position Information Renewal" message is sent.

10. The method of claim 7, wherein the WLAN access point position

information includes access point position information and access point service radius information.